

WHAT IS CLAIMED IS: (u.s.)

1. A display device, setting a value of a current allowed to flow to an electro-optic element of each pixel so as to drive the electro-optic element on the basis of the current, wherein the pixel includes:

a first wiring for allowing the current to flow to the electro-optic element;

a first active element, provided in series to the electro-optic element so as to be positioned in a path for allowing the current to flow from the first wiring to the electro-optic element, which has a control terminal for controlling conductance of the first active element;

a second active element, provided in series to the electro-optic element and the first active element so as to be positioned in the path, which has a control terminal for allowing/disallowing conduction;

an electric charge retaining section for storing electric charge so as to apply a voltage corresponding to thus stored electric charge to the control terminal of the first active element as a control voltage for controlling the conductance of the first active element;

a third active element, provided in a path for supplying the electric charge to the electric charge retaining section, which has a control terminal for allowing/disallowing conduction, said third active element

causing the electric charge retaining section to retain the electric charge by disallowing conduction;

a second wiring for applying a control voltage for allowing/disallowing conduction to the control terminal of the second active element; and

a third wiring for applying a control voltage for allowing/disallowing conduction to the control terminal of the third active element.

2. A display device, setting a value of a current allowed to flow to an electro-optic element of each pixel so as to drive the electro-optic element on the basis of the current, wherein the pixel includes:

a first wiring for allowing the current to flow to the electro-optic element;

a first active element, provided in series to the electro-optic element so as to be positioned in a path for allowing the current to flow from the first wiring to the electro-optic element, which has a control terminal for controlling conductance of the first active element;

a second active element, provided in series to the electro-optic element and the first active element so as to be positioned in the path, which has a control terminal for allowing/disallowing conduction;

an electric charge retaining section for storing electric

charge so as to apply a voltage corresponding to thus stored electric charge to the control terminal of the first active element as a control voltage for controlling the conductance of the first active element;

a third active element, provided in a path for supplying the electric charge to the electric charge retaining section, which has a control terminal for allowing/disallowing conduction, said third active element causing the electric charge retaining section to retain the electric charge by not conducting;

a second wiring for applying a control voltage for allowing/disallowing conduction to the control terminal of the second active element;

a third wiring for applying a control voltage for allowing/disallowing conduction to the control terminal of the third active element; and

a fourth active element, provided between (i) a connection point of the first active element and the second active element and (ii) the second wiring, said fourth active element having a control terminal, connected to the third wiring, which allows/disallows conduction..

3. The display device as set forth in claim 1, wherein a current source circuit and a voltage source circuit are connected to the first wiring in a switchable manner.

4. The display device as set forth in claim 2, wherein a current source circuit and a voltage source circuit are connected to the first wiring in a switchable manner.

5. The display device as set forth in claim 3, wherein a first operation is performed, and a second operation is performed thereafter, said first operation being such that: the current source circuit is connected to the first wiring so as to set the value of the current allowed to flow to the electro-optic element of the pixel, said second operation being such that: the voltage source circuit is connected to the first wiring so as to allow the current whose value has been set by performing the first operation to flow to the electro-optic element of the pixel.

6. The display device as set forth in claim 4, wherein a first operation is performed, and a second operation is performed thereafter, said first operation being such that: the current source circuit is connected to the first wiring so as to set the value of the current allowed to flow to the electro-optic element of the pixel, said second operation being such that: the voltage source circuit is connected to the first wiring so as to allow the current whose value has been set by performing the first operation to flow to the

electro-optic element of the pixel.

7. The display device as set forth in claim 5, wherein:
the current source circuit outputs a plurality of
current values, and

the first operation and the second operation that is
performed after the first operation are performed plural
times at a predetermined period.

8. The display device as set forth in claim 6, wherein:
the current source circuit outputs a plurality of
current values, and

the first operation and the second operation that is
performed after the first operation are performed plural
times at a predetermined period.

9. A display device, setting a value of a current
allowed to flow to an electro-optic element of each pixel so
as to drive the electro-optic element on the basis of the
current, wherein the pixel includes:

a firstly-ordered wiring for allowing the current to
flow to the electro-optic element;

a firstly-ordered active element, provided in series to
the electro-optic element so as to be positioned in a path
for allowing the current to flow from the firstly-ordered

wiring to the electro-optic element, which has a control terminal for controlling conduction of the firstly-ordered active element;

an electric charge retaining section for storing electric charge so as to apply a voltage corresponding to thus stored electric charge to the control terminal of the firstly-ordered active element as a control voltage for controlling the conductance of the firstly-ordered active element;

a secondly-ordered active element, provided in a path for supplying the electric charge to the electric charge retaining section, which has a control terminal for allowing/disallowing conduction, said secondly-ordered active element causing the electric charge retaining section to retain the electric charge by disallowing conduction;

a secondly-ordered wiring for applying a control voltage for allowing/disallowing conduction to the control terminal of the secondly-ordered active element; and

a thirdly-ordered wiring for providing a reference voltage, which is a fraction of the voltage corresponding to the electric charge stored in the electric charge retaining section, to the electric charge retaining section.

10. The display device as set forth in claim 9, wherein a current source circuit and a voltage source circuit are

connected to the firstly-ordered wiring in a switchable manner.

11. The display device as set forth in claim 10, wherein a first operation is performed, and a second operation is performed thereafter, said first operation being such that: the current source circuit is connected to the firstly-ordered wiring so as to set the value of the current allowed to flow to the electro-optic element of the pixel, said second operation being such that: the voltage source circuit is connected to the firstly-ordered wiring so as to allow the current whose value has been set by performing the first operation to flow to the electro-optic element of the pixel.

12. The display device as set forth in claim 11, wherein:

the current source circuit outputs a plurality of current values, and

the first operation and the second operation that is performed after the first operation are performed plural times at a predetermined period.

13. A display device, setting a value of a current allowed to flow to an electro-optic element of each pixel so

as to drive the electro-optic element on the basis of the current, wherein the pixel includes:

a wiring for allowing the current to flow to the electro-optic element;

an active element, provided in series to the electro-optic element so as to be positioned in a path for allowing the current to flow from the wiring to the electro-optic element, which has a control terminal for controlling conductance of the active element; and

an electric charge retaining section for storing electric charge so as to apply a voltage corresponding to thus stored electric charge to the control terminal of the active element as a control voltage for controlling the conductance of the active element, and

said display device includes:

a current source circuit which outputs a constant current to the wiring so as to perform a first operation in which the electric charge retaining section is made to store electric charge corresponding to the current which has been allowed to flow to the active element so that a circuit of the pixel memorizes the current; and

a voltage source circuit which outputs a low voltage so as to perform a second operation, in which the current memorized in the circuit is allowed to flow to the electro-optic element via the active element, after

performing the first operation, said current source circuit and said voltage source circuit being provided in a switchable manner.

14. The display device as set forth in claim 13, wherein:

the current source circuit outputs a plurality of current values, and

the first operation and the second operation that is performed after the first operation are performed plural times at a predetermined period.